

MATH 251: Practice 7

June 3, 2015

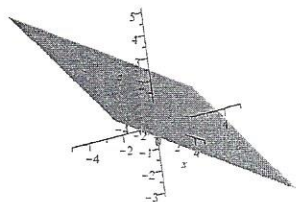
Name: Solutions

Match the following equations to their graphs and contour plots.

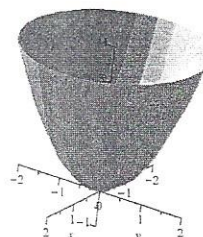
1. $z = x^2 + y^2$
2. $z^2 = x^2 + y^2$
3. $z = 2 - 3x + 2y$
4. $z = x \cos(y)$

The contours drawn in each plot on the back of this page are

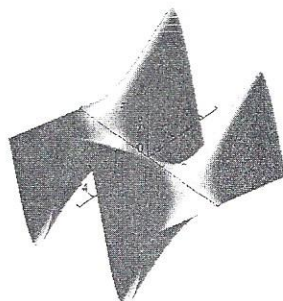
$$z = \left\{ -2, -\frac{3}{2}, -1, -\frac{1}{2}, 0, \frac{1}{2}, 1, \frac{3}{2}, 2 \right\}.$$



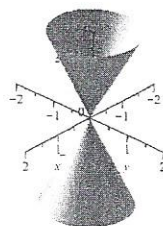
(a) 3



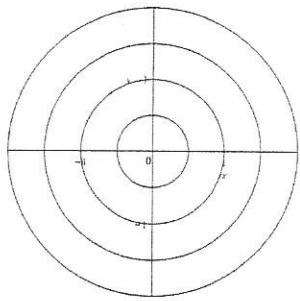
(b) 1



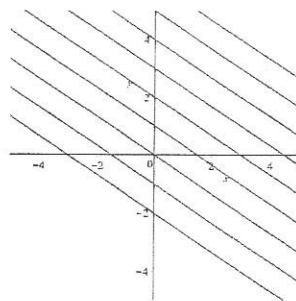
(c) 4



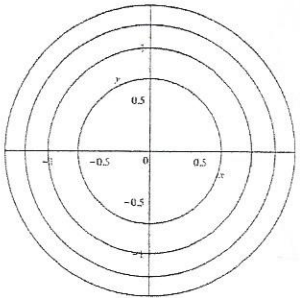
(d) 2



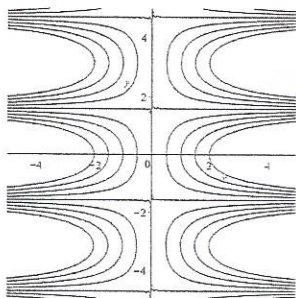
(a) 2



(b) 3



(c) 1



(d) 4